

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Cancelled)

2. **(Currently Amended)** A method for treating a disorder, disease or condition benefiting from an increase in mitochondrial respiration; wherein the disorder, disease or condition is selected from the group consisting of obesity, ~~atherosclerosis, hypertension,~~ diabetes, and type 2-diabetes, impaired glucose tolerance, dyslipidemia, coronary heart disease, gallbladder-disease, osteoarthritis, endometrial cancer, breast cancer, prostate cancer, and colon-cancer, comprising administering to a patient in need thereof a therapeutically effective amount of a compound having a slope calculated from the equation

$$X^n = (Y_2 - Y_0) / (Y_1 - Y_0)$$

wherein

$Y_0$  is the degree of stimulation measured as counts per minute (cpm) of radioactivity in control samples without added test compound,

and

$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/2$ ,

$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $2 \times EC_{50}$ , and

X is 2,

or

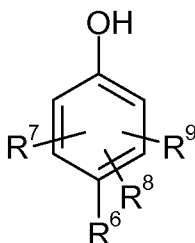
$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/3$ ,

$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $3 \times EC_{50}$ , and

X is 3,

and

n is the slope,  
wherein,  
the value of the slope n calculated for the compound is less than the value of the slope n calculated for carbonylcyanide *p*-trifluoromethoxy-phenylhydrazone as test compound;  
and wherein the compound is of formula (III)



(III)

wherein

$R^6$  is halogen,  $-CHO$ ,  $-CO_2R^{43}$ ,  $-COR^{43}$ ,  $-SO_3H$ ,  $-CCl_3$ ,  $-CF_3$ ,  $-CN$ ,  $-CH=CH-R^{44}$ ,  $-C(R^{44})(R^{45})$ ,  $-SOR^{43}$ ,  $-SO_2R^{43}$  or aryl substituted with from one to five substituents selected from halogen,  $-CHO$ ,  $-CO_2R^{43}$ ,  $-COR^{43}$ ,  $-SO_3H$ ,  $-CCl_3$ ,  $-CF_3$ ,  $-NO$ ,  $-NO_2$ ,  $-CN$ ,  $-CH=CH-R^{44}$ ,  $-CH(R^{44})(R^{45})$ ,  $-SOR^{43}$ , or  $-SO_2R^{43}$ , wherein

$R^{43}$  is hydrogen or alkyl; and

$R^{44}$  and  $R^{45}$  independently of each other are halogen,  $-CHO$ ,  $-CO_2R^{46}$ ,  $-COR^{46}$ ,  $-SO_3H$ ,  $-CCl_3$ ,  $-CF_3$ ,  $-NO$ ,  $-NO_2$ ,  $-CN$ ,  $-SOR^{46}$ ,  $-SO_2R^{46}$ , wherein

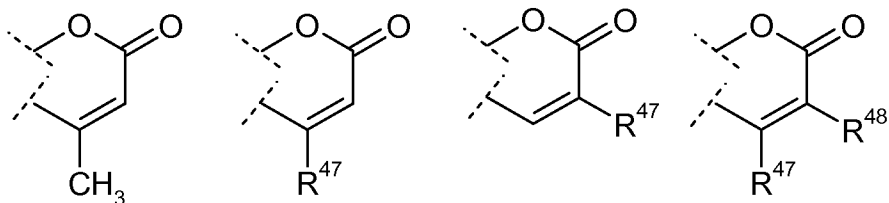
$R^{46}$  is hydrogen, alkyl, or aryl;

$R^7$  is alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, or alkyl-C(O)-O-; and

$R^8$  and  $R^9$  independently of each other are hydrogen, alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, alkyl-C(O)-O-, or aryl;

or

$R^7$  and  $R^8$  together form one of the diradicals



wherein R<sup>47</sup> and R<sup>48</sup>, independently of each other, are hydrogen, alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, or alkyl-C(O)-O-,

wherein the two valence atoms in the diradical are attached to adjacent carbon atoms in the phenyl ring; and

R<sup>9</sup> is hydrogen, alkyl, nitro, halogen, alkyl-O-, or alkyl-C(O)-;

or a pharmaceutically acceptable salt, or solvate thereof.

3. (Cancelled)

4. (Cancelled)

5. (Previously presented) A method according to claim 2, wherein the condition is obesity.

6. (Previously presented) A method according to claim 2, wherein the disease is type 2 diabetes.

7. (Original) A method according to claim 6, wherein the patient in need thereof is obese.

8-13. (Cancelled)

14. (Previously presented) A method according to claim 2, wherein the compound is a chemical uncoupler.

15. (Previously presented) A method according to claim 2, wherein the compound is a cation.

16. (Cancelled)

17. (Previously presented) A method according to claim 2, wherein the compound is 4-hydroxy-3-nitroacetophenone.

Attorney Docket No. 6443.500-US  
Hansen et al.  
Serial No. 10/699,338 Filed October 31, 2003

18-49. (Cancelled)